**Objective?**

* To explore advanced memory protection using CHERI architecture and AFL fuzzing?
* To demonstrate CHERI architecture with AFL fuzzing and its benefits to security?
* To analyze the security implications of CHERI's fine-grained memory protection in the context of modern software attacks. (zero-day exploits etc.)?
* To provide actionable insights for developers adopting CHERI architecture to enhance memory safety through fuzz testing?
* To highlight improvements in exploit prevention when using CHERI-enhanced memory protection, as validated by fuzzing experiments?